## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	}	Leroux et al.
Title	}	EXTERNALLY GLAZED ARTICLE
Serial Number	}	09/758 741
Filing Date	. }	11 Jan 2001
Art Unit	}	1774
Examiner	<b>)</b>	Dicus, T.
Attorney Docket No.	)	1366 (02-25)
Commissioner for Patent	s	
P.O. Box 1450 Alexandria VA22313-14	150	

Sir:

## AFFIDAVIT UNDER 37 C.F.R. 1.132

- 1. Lawrence J. Heaslip, hereby swear and state that:
- I have been active in iron and steel production technology and, in particular, in the methods and articles used in the casting of steel for the last 29 years.
- I am co-founder of Advent Process Engineering, Inc., which specializes in researching the casting of molten metals and developing novel products and processes based on that research.
- I am currently a consultant for the Vesuvius Group, which manufacturers a broad range of refractory products and has greater than \$1 billion annually in worldwide sales.
- 4. I hold a B.A.Sc. (Bachelor of Applied Science and Engineering) degree from the University of Toronto obtained in 1976 and a Ph.D. in Metallurgical Engineering from the same institution in 1981.
- 5. I am the author or co-author of more than 30 papers in the field of iron and steel production and refractory ceramics.
- 6. I hold 12 patents, particularly relating to refractory articles and processes for use in the iron and steel industry.

- 7. I am very familiar with the equipment and processes used in the casting of steel.
- 8. I have supervised numerous experimental and commercial installations of refractory products; have witnessed the use of such products; and am very familiar with the problems arising in products and processes for the steel casting industry.
- Several of my patents, see, e.g., US 6,027.051, and US 5,944,261, are concerned "thin-slab nozzles" for use in steel casting.
- 10. "Thin-slab nozzle" is a term of art used in the industry and is understood by one skilled in the art of steel casting.
- 11. Most typically a "thin-slab nozzle" is designed to produce a slab of steel from about 50 mm to about 100 mm in thickness directly out of the continuous casting mold.
- 12. I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing

Date: (Intl /

Dr. Lawrence J. Heaslin